PRODUCT INFORMATION



N⁶-Methyladenosine

Item No. 28833

CAS Registry No.: 1867-73-8

Formal Name: N-methyl-adenosine

NSC 29409 Synonym: MF: $C_{11}H_{15}N_5O_4$ 281.3 FW: **Purity:** ≥95% λ_{max} : 266 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

N⁶-Methyladenosine is an adenosine analog.¹ It inhibits epinephrine-induced contraction of isolated guinea pig ileum and thoracic aorta when used at a concentration of 10 μM. N⁶-Methyladenosine (1 mg/kg, i.v.) decreases arterial blood pressure and renal blood flow and increases peripheral resistance in anesthetized dogs.² It also inhibits tumor growth in the C3H/ST and C3HB/ST mouse models of spontaneous mammary adenocarcinomas.³ N⁶-Methyladenosine is also the most prevelant mRNA modification in eukaryotes and has roles in cell viability and development.⁴

References

- 1. Leslie, S.W., Borowitz, J.L., and Miya, T.S. Adenosine analogs: Structure-activity relationships in vascular and intestinal smooth muscle. J. Pharm. Sci. 62(9), 1449-1452 (1973).
- 2. Bhanalaph, T., Mittelman, A., Ambrus, J.L., et al. Effect of adenosine and some of its analogs on renal hemodyamics. J. Med. 4(3), 178-188 (1973).
- 3. Strong, L.C. and Matsunaga, H. Comparison of the effect of three nucleosides and a liver emulsion upon the inhibition of cancer in mice. J. Surg. Oncol. 4(3), 248-254 (1972).
- 4. Wang, X., Lu, Z., Gomez, A., et al. N⁶-Methyladenosine-dependent regulation of messenger RNA stability. Nature 505(7481), 117-120 (2014).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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